



START

Department of Energy

Richland Operations Office
P.O. Box 550
Richland, Washington 99352

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90-PPB-276

NOV 21 1990

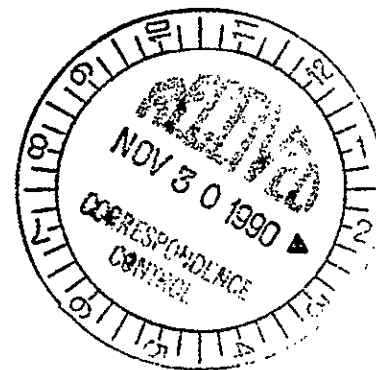
Mr. P. T. Day
Hanford Project Manager
U.S. Environmental Protection Agency
Region 10
712 Swift Blvd.
Suite 5
Richland, Washington 99352

Mr. Timothy L. Nord
Hanford Project Manager
State of Washington
Department of Ecology
Mail Stop PV-11
Lacey, Washington 98503

Dear Messrs. Day and Nord:

300 AREA WASTE ACID TREATMENT SYSTEM CLOSURE PLAN - NOTICE OF DEFICIENCY RESPONSE TABLE

The enclosed Notice of Deficiency (NOD) Response Table for the 300 Area Waste Acid Treatment System Closure Plan is being submitted to the U.S. Environmental Protection Agency and the State of Washington Department of Ecology on November 21, 1990, in accordance with the schedule provided for under the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement)."



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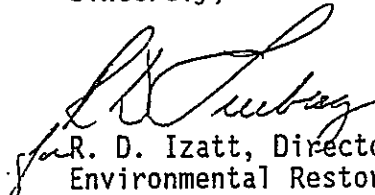
Messrs. Day and Nord

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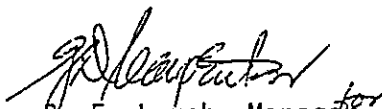
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If you have any questions regarding this NOD response table, please contact Mr. C. E. Clark of the U.S. Department of Energy, Richland Operations Office on FTS 444-9333 or (509) 376-9333, or Ms. C. J. Geier of the Westinghouse Hanford Company on FTS 444-2237 or (509) 376-2237.

Sincerely,


R. D. Izatt, Director
Environmental Restoration Division
Richland Operations Office

ERD:CEC


B. E. Lerch, Manager
Environmental Division
Westinghouse Hanford Company

Enclosure:
300 Area WATS NOD Response Table

cc w/encl:

D. L. Duncan, EPA

M. E. Lerchen, Ecology

~~R. E. Lerch, WHC w/o encl.~~

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| 1. | <p><u>Page 1-1, line 19.</u> The <i>Resource Conservation and Recovery Act of 1976</i> (RCRA) is referenced for a definition of closure.</p> <p><u>Ecology Requirement:</u> The 300 Area Waste Acid Treatment System (300 Area WATS) will be closed under the State Dangerous Waste Regulations, WAC 173-303. Closure is defined under WAC 173-303-040(12).</p> <p><u>DOE-RL/WHC Response:</u> A reference to WAC 173-303-040 will be included in the closure plan at this location.</p> |
| 2. | <p><u>Page 2-2.</u> Figure 2-1 is not an adequate map.</p> <p><u>Ecology Requirement:</u> Compliance with WAC 173-303 is required; a checklist of map requirements is enclosed. Refer to the 305-B Storage Facility Permit Application for an example.</p> <p><u>DOE-RL/WHC Response:</u> A map showing the relationship of the 300 Area WATS to the rest of the 300 Area will be added. The extensive maps required in Part B permit applications [WAC 173-303-806(4)(a)] are not necessary in closure plans. If Figure 2-1 is not adequate for a specific reason, additional information can be added to the figure.</p> |
| 3. | <p><u>Page 5-1.</u> The groundwater contamination at this site will be addressed as part of the 300-FF-5 Operable Unit for which a draft Remedial Investigation/Feasibility Study (RI/FS) work plan was prepared in 1989. No further information is given. While Ecology accepts that groundwater contamination for this facility is appropriately addressed as part of the 300-FF-5 Operable Unit, the information presented is inadequate.</p> <p><u>Ecology Requirement:</u> A brief description of the 300-FF-5 Operable Unit is required. This description must include the following:</p> <ul style="list-style-type: none">• Schedule for groundwater cleanup• Groundwater cleanup objectives• The 300-FF-5 Operable Unit boundary. |

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3.	<p>(Cont'd)</p> <p>DOE-RL/WHC Response: The following information will be included in Section 5.</p> <p>The 300-FF-5 Operable Unit consists of the aquifer beneath the 300-FF-1, 300-FF-2, and 300-FF-3 Operable Units. The operable unit is defined by "the observed and assumed extent of uranium contamination in the groundwater" (300-FF-5 Operable Unit Work Plan). Ultimately, the operable unit will include all contamination exceeding applicable or relevant and appropriate requirements emanating from the three operable units detected in groundwater and sediments below the water table. The Columbia River forms the eastern boundary of the unit (figures will be included).</p> <p>The current schedule for the completion of the remedial investigation/feasibility study process is October of 1996. Following this process, a record-of-decision on the remediation of the aquifer will be handed down, and remediation will begin.</p> <p>The remedial action objectives for this operable unit will be based on the following general objectives:</p> <ul style="list-style-type: none"><li>• Protecting human health by ensuring applicable or relevant and appropriate requirements will not be exceeded and health risks, as determined through analysis of all exposure pathways, will be kept at or below acceptable limits<li>• Ensuring acceptably low risks to the environment, such as Columbia River biota.
4.	<p><u>Page 6-1, line 6.</u> The text states the closure performance standard will be a health-based standard. This is inappropriate.</p> <p><u>Ecology Requirement:</u> The closure standard for this facility will be background. All other citations of health-based standards must be changed to background.</p> <p>DOE-RL/WHC Response: See response number 5.</p>

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5.	<p><u>Page 6-1, line 15.</u> The concepts 'baseline', 'baseline threshold', and 'action level' are neither appropriate nor regulatorily acceptable for a clean closure performance standard. Rather, these terms are appropriate for an interim closure. This discussion should be directed towards a determination of background because this is the level which must be attained for a clean closure.</p> <p>Baseline concentrations are appropriate to use for an interim clean-up level for soils prior to the 300-FF-3 Operable Unit investigation. Baseline may only be used for soils and the soils must be remediated to the baseline level via implementation of the closure plan.</p> <p><u>Ecology Requirement:</u> Rewrite this section to include background as the clean closure performance standard. The text should also be rewritten as appropriate to incorporate the concept of baseline as outlined above. Refer to the 300 Area Solvent Evaporator Closure Plan for further guidance.</p> <p><u>DOE-RL/WHC Response:</u> An approach of separately closing the buildings and concrete floors or pads separate from the soil will be adopted. This approach will be made clearer in the closure plan.</p> <p>As defined in Section 6.1, the initial action levels (i.e., identification of contamination) for any soil contamination will be baseline. Baseline is described as local background and the concept of local or area background is consistent with WAC 173-340, <i>The Model Toxic Control Act</i>. The use of local or area background is necessary for facilities in the 300 Area due to the close proximity of other facilities and the possibility for some of the potentially hazardous elements to occur naturally. If the chemical concentrations in the soil in an area that could have been potentially affected by the 300 Area WATS are below baseline (local background) the soil will be considered uncontaminated as far as the 300 Area WATS is concerned and the facility will be closed. If chemical concentrations are above the baseline, that portion of the concentration above the baseline will be considered to be from the 300 Area WATS. When the chemical concentrations are above the baseline, the chemical concentrations will be evaluated to determine the relationship to health based standards. This evaluation is justified because the chemical concentrations may be above the local background but significantly below any health or environmentally-based risk level.</p> <p>Any soil contamination shown to be above baseline and any health or environmental based risk levels will be integrated with the 300-FF-3 Operable Unit RI/FS activities.</p>

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| 5. | (Cont'd)
The concept of using baseline (local background) for concrete floors and pads is justified because the concrete is composed of natural occurring materials, such as gravel, sand, and cement. These materials contain natural occurring elements that are potentially hazardous. Therefore, a background sample of the concrete to be evaluated for contamination must be obtained for comparison. |
| 6. | <u>Page 6-1, line 32.</u> This section states the "clean closure will be accomplished by demonstrating that the constituents used in the 300 Area WATS operations are not present in the soil above action levels." This is incorrect. Clean closure can only be accomplished by demonstrating that the constituents used in the 300 Area WATS operations are not present in the soil above <u>background levels</u> .

<u>Ecology Requirement:</u> Change the text to state that action levels represent interim cleanup levels and that background levels are the only allowable performance levels for clean closure.

<u>DOE-RL/WHC Response:</u> See response number 5. |
| 7. | <u>Page 6-3, line 8.</u> The text states that soil sampling will occur to a depth no deeper than 1 foot. There is no justification stated for this decision.

<u>Ecology Requirement:</u> Change the text to explain why this maximum sampling depth was chosen. Ecology will then determine, based on the submitted rationale, whether a 1-foot maximum sampling depth is acceptable.

<u>DOE-RL/WHC Response:</u> Information to date suggests potential contamination from the 300 Area WATS would be located in the uppermost part of the soil column due to strong adsorption characteristics of the soil. However, the soil sampling depth will be reevaluated using contamination scenarios and assessments similar to those presented in the 2101-M Pond Closure Plan. The objective of these assessments will be to determine the most likely location in the soil column of any potential contaminant from the 300 Area WATS. |

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| 8. | <p><u>Figures 6-2 through 6-6.</u> Although the logic behind these flow charts is appropriate, the performance standard (baseline levels) associated with the decision nodes is not appropriate (see NOD comments 5 and 6 supra).</p> <p>DOE-RL/WHC Response: See response number 5.</p> |
| 9. | <p><u>Table 7-1.</u> This table shows that 'initial action levels' for potential compliance constituents is the 'baseline levels.' This may be acceptable for interim cleanup but not clean closure.</p> <p><u>Ecology Requirement:</u> Revise the table to indicate that background is the ultimate performance standard applied to these potential compliance constituents for clean closure.</p> <p>DOE-RL/WHC Response: See response number 5.</p> |
| 10. | <p><u>Page 7-3, line 48.</u> The text states that areas where cracks or other potential pathways exist concrete will be cored and samples taken of underlying soils to a depth of 1 foot. No explanation is given to justify the maximum depth for soil samples. Also, sampling strategy is offered regarding number of samples to be taken of areas around cracks.</p> <p><u>Ecology Requirement:</u> Provide explanation for choosing a 1-foot maximum soil sampling depth around cracks. Also, provide a strategy for determining how many samples will be taken in the vicinity of cracks.</p> <p>DOE-RL/WHC Response: See response number 7 for the reply concerning the 1-foot sampling depth.</p> <p>The criteria to be used in determining how many samples will be taken in the vicinity of a crack is presented in Section 7.3.2.5.</p> |
| 11. | <p><u>Figures 7-3 through 7-6.</u> The same concern addressed in NOD comment 8 applies to these figures.</p> <p><u>Ecology Requirement:</u> Revise these figures as stated in NOD comment 8 supra.</p> <p>DOE-RL/WHC Response: See response number 5.</p> |

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| 12. | <p><u>Page 7-43, line 28.</u> The text addresses personnel training in this section and lists several courses which personnel assigned to the 300 Area WATS will be required to take prior to working on this closure plan activity.</p> <p><u>Ecology Requirement:</u> This section must also include a plan to completely familiarize all personnel assigned to this activity prior to beginning the work.</p> <p><u>DOE-RL/WHC Response:</u> The personnel training requirements presently described in the closure plan are prerequisites to any field work. This clarification will be made.</p> |
| 13. | <p><u>Figures 7-21 through 7-24.</u> These figures list and identify the activities associated with closure of the 300 Area WATS. Further explanation is required regarding the components of these schedules and the interrelationship of the components to one another.</p> <p><u>Ecology Requirement:</u> Provide additional explanation <u>in the text</u> concerning the details of the closure plan schedules listed in Figures 7-21 through 7-24. Also, provide further explanations about the amount of time required to perform each task identified in the schedule.</p> <p><u>DOE-RL/WHC Response:</u> The bar graph schedules presented in the closure plan show the total time required for closure and the time required for intervening closure activities. These schedules were prepared in a consistent manner with other Hanford Site closure plans.</p> <p>The second sentence will be deleted and the following information will be included in Section 7.7, Schedule of Closure, for clarification:</p> <p>"The closure of the 300 Area WATS will proceed, as shown in Figures 7-21 through 7-24, on a facility by facility basis. This approach is necessary to utilize equipment and personnel most effectively.</p> <p>Figure 7-21 illustrates the preparation necessary to begin the closure process. The closure plan approval is shown at the end of week 12. Figures 7-22 through 7-24 illustrates the closure schedule for each of the facilities associated with the 300 Area WATS. The week numbers on a figure correspond to the week numbers on the remaining figures."</p> <p>The figure captions will be changed to reflect the above information.</p> |

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author	Addressee	Correspondence No.
D. L. Banning, 376-1057	R. D. Izatt, DOE-RL	Incoming

Subject: 300 AREA WASTE ACID TREATMENT SYSTEM - NOTICE OF DEFICIENCY RESPONSE
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Author

Addressee

Correspondence No.

D. L. Banning, 376-1057

P. T. Day, EPA

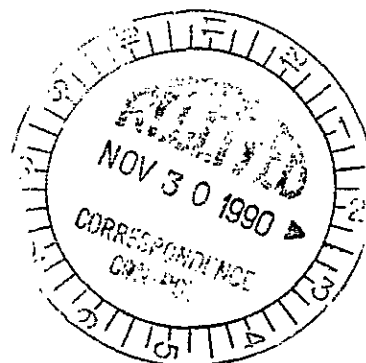
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